

REMARKS

The following remarks are fully and completely responsive to the Office Action dated May 8, 2001. Claims 2, 4-7 and 13-20 are pending in this application. By this Amendment, claims 1, 3 and 8-12 have been canceled, claims 2, 4, 6 and 7 have been amended and new claims 13-20 have been added. In the outstanding Office Action, the title was objected to; the drawings were objected to; claim 10 was rejected under 35 U.S.C. § 112, second paragraph; claims 1-2, 8 and 11-12 were rejected under 35 U.S.C. § 102(b); and claims 4, 7 and 9 were rejected under 35 U.S.C. § 103(a). Claims 3 and 5-6 were indicated as containing allowable subject matter, but were objected to as being dependent upon a rejected base claim. No new matter has been added. Claims 2, 4-7 and 13-20 are presented for reconsideration.

Title Objection

In the outstanding Office Action, the title of the invention was objected to as not being descriptive. Applicant has replaced the title with a new title that is clearly indicative of the invention to which the claims are directed. Therefore, Applicant respectfully requests reconsideration and withdrawal of the objection to the title.

Drawing Objection

In the outstanding Office Action, the drawings were objected to because the Office Action asserted that Fig. 4 should have a box around the elements and that this box should be labeled with reference numeral 6 since it is a detailed figure of calculation

circuit 6. Applicant has amended sheet 3, which contains Figure 4, as suggested by the Examiner. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection to the drawings.

35 U.S.C. § 112, Second Paragraph

Claim 10 was rejected under 35 U.S.C. § 112, second paragraph, because this claim recites the limitation “the shift circuit” in line 5 without providing sufficient antecedent basis for this limitation in the claim. Applicant’s cancellation of claim 10 renders this objection moot.

35 U.S.C. § 102(b)

Claims 1-2, 8 and 11-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ogawa et al. (U.S. Patent No. 4,982,179, “Ogawa”). The cancellation of claims 1, 8 and 11-12 and the amendment of claim 2 to depend from new claim 13 render this rejection moot.

35 U.S.C. § 103(a)

Claims 4, 7 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa. The cancellation of claim 9 and the amendment of claim 4 to depend from new claim 13 render this rejection moot.

New Claims

New claims 13-20 have been added to claim additional features of the present invention. The features recited in the newly added independent claims 13 and 17 are neither taught nor suggested by the cited prior art.

New claims 13 and 17 recite in part:

...a memory that stores trigonometric function values covering a predetermined number of phases at each address thereof for each of the phases and outputs a trigonometric function value stored at a designated address.

In contrast, Ogawa discloses a cosine function generator 18 and a sine function generator 19 that carry out cosine and sine conversions of the values of particular angles. However, Ogawa fails to teach a memory that stores trigonometric function values covering a predetermined number of phases at each address thereof for each of the phases and outputs a trigonometric function value stored at a designated address. Consequently, Ogawa fails to teach and/or suggest this element of the claimed invention.

Independent claim 13 also recites in part:

...an address calculating circuit that receives a setting signal for selecting a predetermined video format from among a plurality of video formats each having a different chrominance subcarrier frequency, the address calculating circuit calculates a value to be added based on the chrominance subcarrier frequency of the predetermined video format selected with the setting signal, the predetermined number of phases, and the predetermined frequency of the clock pulses, and the address calculating circuit designates a next address of the memory by adding the calculated value to be added to the designated address.

In contrast, Ogawa discloses that a VAL setting circuit 30 sets a VAL figure. This figure is actually set by setting switches or information fed from a CPU. The VAL figure is input to a digital adder 16 as an operation constant and added to a phase information value θ . The VAL figure is expressed by f_{sc}/f_a , or, in other words, the subcarrier frequency divided by the clock frequency of the digital signals (see Fig. 2 and column 4, lines 14-28). Thus, Ogawa only discloses that the value to be added is calculated from the subcarrier frequency and the clock frequency. However, Ogawa fails to teach and/or suggest that the value to be added is based on the predetermined number of phases.

Consequently, Ogawa fails to teach and/or suggest the invention recited in claim 13. Specifically, this reference fails to teach and/or suggest that the value to be added is calculated from the chrominance subcarrier frequency, the predetermined frequency of the clock pulses and the predetermined number of phases.

As discussed above, Ogawa fails to disclose and/or suggest the claimed invention. Specifically, Ogawa fails to teach and/or suggest a memory that stores trigonometric function values covering a predetermined number of phases at each address thereof for each of the phases and outputs a trigonometric function stored at a designated address. Regarding claim 13 and the claims dependent thereon, Ogawa fails to disclose and/or suggest that the value to be added is calculated from the chrominance subcarrier frequency, the predetermined frequency of the clock pulses and the predetermined number of phases. Accordingly, Applicant respectfully requests consideration and allowance of new claims 13-20, and claims 2 and 4-7 that depend thereon.

Conclusion

Applicant's amendments and remarks have overcome the objections and rejections set forth in the Office Action dated May 8, 2001. Specifically, Applicant's amendment to the title overcomes the objection to the title. Applicant's amendment of Figure 4 overcomes the objection to the drawings. Applicant's cancellation of claim 10 overcomes the rejection of this claim under 35 U.S.C. § 112, second paragraph. Applicant's cancellation of claims 1, 8 and 11-12 and the amendment of claim 2 to depend from new claim 13 render moot the rejection of these claims under 35 U.S.C. § 102(b). Applicant's amendment of claim 4 to depend from new claim 13 and the cancellation of claim 9 render moot the rejection of claims 4, 7 and 9 under 35 U.S.C. § 103(a). Applicant's remarks have distinguished new claims 13-20 from the cited prior art. Accordingly, claims 2, 4-7 and 13-20 are in condition for allowance. Therefore, Applicant respectfully requests consideration and allowance of claims 2, 4-7 and 13-20.

Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not considered to be timely filed, Applicant hereby petitions for an appropriate extension of time.

The Commissioner is authorized to charge payment for any additional fees which may be required with respect to this paper to our Deposit Account No. 01-2300, making reference to attorney docket number 103213-09008.

Respectfully submitted,
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Enclosures: Renewed Petition under 37 CFR § 1.137(b)
Replacement Drawing Sheet of Fig. 4

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